

2013 Drinking Water Consumer Confidence Report for calendar year 2012 CENTRAL WELD COUNTY WATER DISTRICT

PWSID CO 0162122

Esta es informacion importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's Annual Water Quality Report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Our water comes from the west slope of the Colorado Rockies and is delivered through the Colorado Big Thompson Project and is filtered at the Carter Lake Treatment Plants.

If you have any questions about this report or concerning your water utility, please contact Central Weld County Water District at (970) 352-1284. We want our valued customers to be informed about their water utility, the services we provide and the quality water we deliver to you every day.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at 1-800-426-4791.or by visiting http://water.epa.gov/drink/contaminants.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, or mining.
- Pesticides and herbicides that may come from a variety of sources, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Our Water Source Name Source Type Water Type Purchased Carter Lake 135476 SW Consecutive connection Surface Water

The Colorado Department of Public Health and Environment has provided a Source Water Assessment Report for the Carter Lake Filter Plant water supply. You may obtain a copy of the report by visiting http://wqcdcompliance.com/ccr, The report is located under "Source Water Assessment Reports", then "Assessment Report by County". Select WELD county and find 162122; CENTRAL WELD CNTY WD. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that contamination has or will occur. Rather, this information is used to evaluate the need to improve water treatment capabilities and to prepare for future contamination threats. This information is used to ensure that quality finished water is delivered to you. In addition, the source water assessment results provide a starting point from which a source water protection plan may be developed.

To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

- <u>Parts per million (ppm) or Milligrams per liter (mg/l):</u> One part per million corresponds to one minute in two years or one penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter (μg/l): One part per billion corresponds to one minute in 2,000 years, or one penny in \$10,000,000.
- Parts per trillion (ppt) or Nanograms per liter (ng/l): One part per trillion corresponds to one minute in 2,000,000 years, or one penny in \$10,000,000,000.
- Parts per quadrillion (ppq) or Picograms per liter (pg/l): One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000.
- <u>Picocuries per Liter (pCI/l):</u> A measure of radio activity in water.
- <u>Nephelometric Turbidity Unit (NTU):</u> Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of five NTU is just noticeable to the average person.
- <u>Action Level (AL):</u> The concentration of a contaminant, if exceeded, triggers treatment or other requirements a water system must follow.
- <u>Treatment Technique (TT):</u> A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- <u>Maximum Contaminant Level Goal (MCLG)</u>: The "goal" is the level of a contaminant in drinking water, below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- <u>Maximum Contaminant Level (MCL)</u>: The "maximum allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- <u>Maximum Residual Disinfectant Level Goal (MRDLG):</u> The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- <u>Maximum Residual Disinfectant Level (MRDL)</u>: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Central Weld is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Additional information is available from the EPA *Safe Drinking Water Hotline* at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Detected Contaminant(s)

Central Weld County Water District routinely monitors for contaminants in your drinking water according to Federal and State laws. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. This table shows the results of our monitoring for the period of January 1 to December 31, 2012; unless otherwise noted.

NOTE: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that Central Weld County Water District did not detect any contaminants in the last round of monitoring.

Microorganism Contaminants Sampled in the Distribution System								
Contaminant Name	Monitoring Period	Results	Number of Samples	MCL	MCLG	MCL Violation?	Typical Sources	
COLIFORM	7/1/11 to 7/31/11	2 positive samples	10	No More than 1 positive sample per period	0	Yes	Naturally present in the environment	
E.COLI	N/A to N/A	1 positive sample	N/A	A routine sample and a repeat sample are Total Coliform Positive and one is also Fecal Positive/E.Coli positive	0	No	Human and animal fecal waste	

On January 12, 2012, during a software upgrade at the Carter Lake Filter Plant, one sample of turbidity and chlorine was missed, resulting in a Tier 3 monitoring violation. The samples taken immediately before and after the missed sample met drinking water standards.

Violation(s) and Formal Enforcement Action(s)

Formal Enforcement Actions – No Formal Enforcement Actions to Report								
Violations								
Type	Category	Analyte	Monitoring	Federal	Health Effects	Compliance	MCL or	
		Name	Period	Period		Result	TT Level	
MCL	Maximum	COLIFORM	07/01/2011	07/01/2011	Coliforms are bacteria that	N/A	N/A	
(TCR),	Contaminant	(TCR)	to	to	are naturally present in the			
ACUTE	Level		07/31/2011	07/31/2011	environment and are used as			
	Violation				an indicator that other,			
					potentially harmful, bacteria			
					may be present. Coliforms			
					were found in more samples			
					than allowed and this was a			
					warning of potential			
					problems.			
Additional Violation Information: Central Weld County Water District resolved the violation by changing the sample location.								

Compounds Regulated at the Treatment Plant

Compounds	tegulated at the Treat		CCR	Level	Violation		Likely Source of
Contaminant	MCL	MCLG	Unit	Detected	Yes or No	Sample Date	Contamination
							Determined as no violation.
m 1:1:	TT ≤ 1.0	N/A	NTU	0.41	NO	12/2012	
Turbidity	TT <u>≤</u> 0.3	N/A	NTU	95%	NO	Continual	
Barium	2	2	ppm	0.018	NO	1/10/2012	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	4	4	ppm	0.44	NO	1/10/2012	Erosion of natural deposits, water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

There are two standards for turbidity. The reported monthly turbidity must be less than or equal to 0.3 NTU at least 95% of the time. Also, turbidity must never be higher than 1.0 NTU at any time. The highest turbidity occurred in December 2012. Turbidity readings ranged from 0.01 – 0.31 NTU. Fluoride is added to help reduce tooth decay. In 2011, based on the recommendation from the Departments of Health & Human Services and the EPA, Carter Lake Filter Plant began reducing the level of fluoride to 0.7 ppm.

Compounds Regulated in the Distribution System

Compounds	l	11 1110 25 151	1				
				Level			
			CCR	Detected/	Violation	Sample	
Contaminant	MCL	MCLG	Units	Range	Yes or No	Date	Likely Source of Contamination
				0.31			Corrosion of household plumbing systems;
				Range		August	erosion of natural deposits; leaching from
Copper	AL= 1.3	1.3	ppm	0.01-0.80	NO	2012	wood preservatives
				6.0			
				Range		August	Corrosion of household plumbing systems,
Lead	AL = 15	0	ppb	0.29-18.7	NO	2012	erosion of natural deposits
				48.18 Avg.			
				Range			
TTHM	80	0	ppb	32.8-59.5	NO	Quarterly	By-product of drinking water chlorination
				32.58 Avg.			
				Range			
HAA5	60	N/A	ppb	20.8-39.6	NO	Quarterly	By-product of drinking water chlorination

No single sample for Copper or Lead exceeded the Action Level. Single level detected is 90th percentile: the range is for all samples. The District is required to sample the Copper and Lead every 3 years. The next samples will be collected in 2015 between June and September due to new regulations.

TTHM - Total Trihalomethanes. Level detected is annual average: the range is for all samples. HAA - Haloacetic. Level detected is annual average; the range is for all samples.

On regulated Compounds								
Contaminant	Level Detected/Range	Likely Source of Contamination	Unregulated compounds are those for which					
Chloroform	18.9 ppb	By-product of drinking water chlorination	EPA has not established drinking water					
Bromodichloromethane 1.9 ppb By-product of drinki		By-product of drinking water chlorination	standards. The purpose of unregulated compound monitoring is to assist in drinking					
Sodium	7.3 ppm	Naturally occurring	water and whether future regulation is					
Methyl Tert-Butyl Ether (MTBE)	Not Tested	Underground storage tanks	warranted.					